

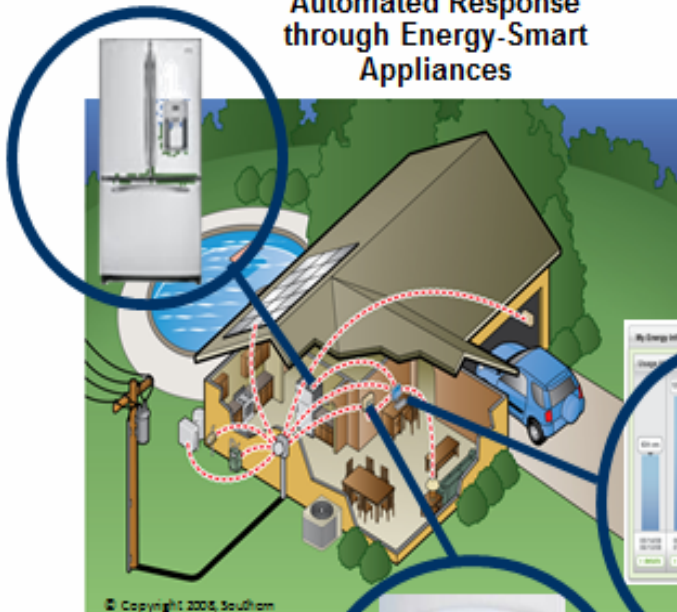
IEPR Lead Commissioner Workshop Zero Net Energy Buildings:

Key Principles for Consideration

**Southern California Edison
July 18, 2012**

Zero Net Energy Buildings

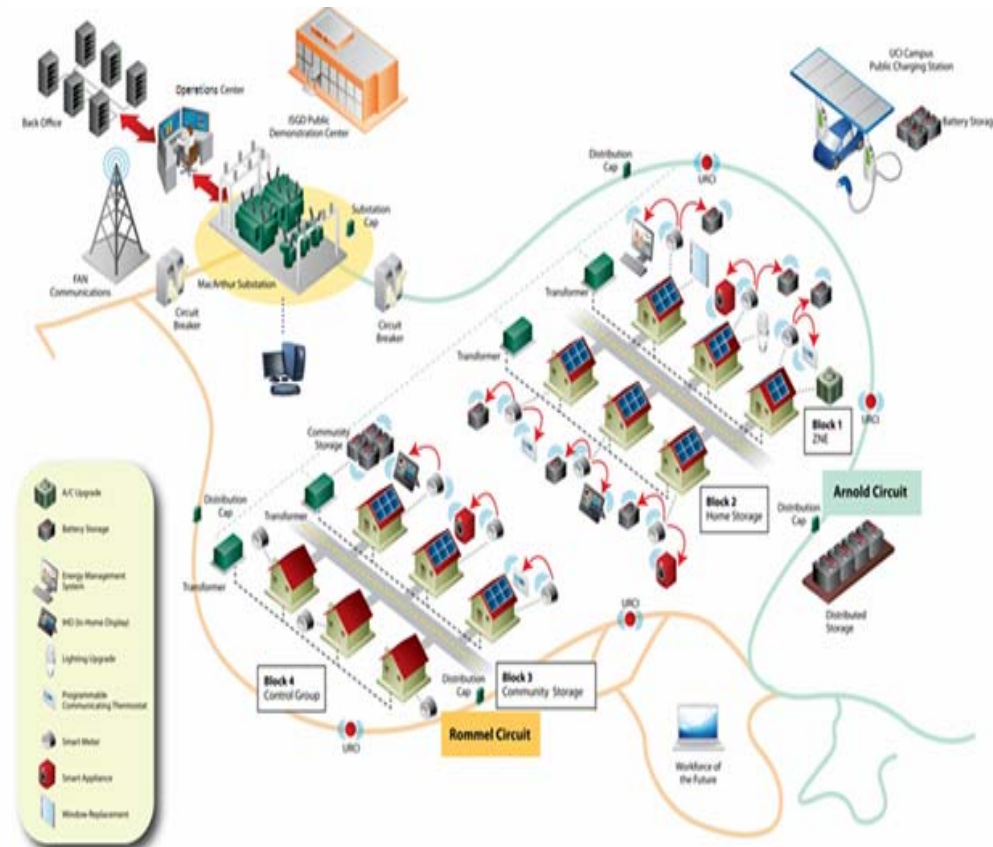
Customer Enabled
Automated Response
through Energy-Smart
Appliances



Improved Load
Management through
Edison Smart
Connect™
Technologies



Energy Information
Drives Energy
Conservation and
GHG Reductions





Defining “Zero Net Energy”

Recommend an **asset-based ZNE definition**, requiring **all cost-effective EE and DR measures** to achieve building performance targets, while ensuring **grid stability and reliability**, and allowing for **flexibility** with the option of “**equivalency**” for meeting energy production needs.

Definition should allow for sufficient **flexibility** to encourage the most **cost-effective** blend of **supply and demand-side management solutions** for achieving ZNE goals, without adversely impacting **grid stability and reliability**.

“**ZNE Equivalent**” options would **allow for all buildings**, including those with limited potential for on-site renewable generation, **to participate** (through utilization of offsite renewables, renewable offsets/credits, and tradeoffs with transportation energy)



5 Guiding Principles for ZNE Buildings:

1. Maintain or improve grid stability to ensure local and system-wide **reliability**
2. Ensure **fair, equitable**, and **affordable** customer **rates**
3. Extend **performance** and **efficiency** standards to include all supply and demand side resources utilized in ZNE buildings
4. Encourage **synergies** of technology such as **DR-capable EE** and **DR-enabled DG**
5. Prioritize most **cost-effective** means of reducing **GHG emissions**